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ABSTRACT

The results of a study of the effect of the tutoring program on the academic performance of 351 students at Southwestern College during the spring 1974 semester are provided, and feedback and comments about the tutoring program are given. Tables show the descriptive, performance, and subjective data for all tutoring, tutoring by departments and classes, and tutoring for Anglo and Mexican/American ethnic groups. Appendixes are: A. Student Profile Card/Tutoring Center and B. Tutoring Evaluation form. (DB)

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CHULA VISTA, CALIFORNIA

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SOUTHWESTERN COLLEGE
TUTORING EVALUATION
SPRING 1974

Research Office
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Co-ordinator of Research
August 1974

JC 740 445

INTRODUCTION

This report submitted by the office of Research at Southwestern College as an evaluation of the EOPS Tutorial Program.

This report has the objective of identifying the effect of the tutoring program upon the academic performance of the students at Southwestern College as well as providing subjective feedback and comments about the tutoring program.

This study focuses on the tutoring services provided through the EOPS program administered through the Student Services Center under the direction of Mr. Carlos Ugalde, Director. It should be noted that other tutoring was being done on campus through the Community College Consortium, Veteran's Program, and some campus departments. EOPS tutoring, however, was by far the largest coordinated tutoring effort operating and the record keeping procedures used allowed this study to be done.

This study also focused upon the Spring 1974 semester in an effort to control for important changes which occurred in the tutoring program; namely, the move from the Student Services Center to the Learning Resources Center and the institution of an improved record keeping method.

METHOD

The method used in this study involved three major approaches resulting in the collection of three types of data.

I. Description

The approach attempted to provide the basic information about the tutoring program. How many are being tutored? Who are they? In what classes and departments? How many visits do they make? For how long do they come? These basic data were collected through the use of a student profile card which was kept on each student during the Spring 1974 semester. (See Appendix A.)

II. The Measurement of Performance

This approach attempted to isolate the actual performance records of tutored students in the classes in which they were tutored. The performance of students tutored in a class was compared against the performance of students in that class who were not tutored. Departmental and total performance statistics were generated by matching and weighting non-tutored performance to include performance data only for those classes and in those proportions to the students who were tutored. In other words, if students were tutored in only two classes in a department, the performance record used for non-tutored students for that department would come only from those two classes and be proportioned accroding to how much tutoring was done in each of the classes. This method has the net effect of removing any performance differences based upon differences in classes.

It would have also been desirable to have controlled for ability levels of students based on placement tests or previous academic performance, however, an attempt to accomplish this resulted in cell sizes so small as to prohibit any meaningful statistical analysis.

Comparisons of tutoring versus non-tutoring performance were made whenever there were at least five students tutored in one class and ten students tutored in that department.

Four measures were used to compare performance differences. "Withdrawal rate" which reported the percentage of "W" grades received, "survival rate" which reported the percentage of students receiving any credit grade, "successful performance rate" which reported the percentage of students receiving a "C" or better grade and "high performance rate" which reported the percentage of students receiving "A" and "B" grades. These measures were used rather than the traditional grade point average measure because it was felt that these measures are more descriptive and useful at understanding the effect of tutoring at different levels of performance.

III. Subjective Evaluation

The second major type of data analyzed was derived from a questionnaire mailed to all of the tutored students which asked them to rate seven different aspects of tutoring, solicited information about how they were introduced to tutoring and asked for comments. (See Appendix B.) This method was used in an effort to analyze the tutee's perceptions of the tutoring process and allow for comparisons of objective performance with subjective ratings.

RESULTS

In the Spring of 1974, the EOPS tutoring service recorded that 351 students were tutored. This amounts to 7% of the day students who received EOPS tutoring. Most of these students (83%) were tutored in only one class. The following shows the number of times students came in for tutoring.

Number of Times	Number of Students	Per cent
1	140	43%
2	49	15%
3-4	49	15%
5-9	53	16%
10 or more	32	10%

There were 1333 hours of tutoring recorded. This would result in an average (mean) of four hours and 15 minutes of tutoring for each student who was tutored. The median number of hours spent in tutoring with each student was one hour and fifteen minutes.

Due to a few students who had a large number of tutoring hours (one student was tutored for 56 hours) the median is probably the more appropriate measure of central tendency.

The tables shown on pages 5-32 show the descriptive, performance and subjective data for all tutoring; tutoring by departments and classes, and tutoring for Anglo and Mexican/American ethnic groups. The format of each page should be self explanatory. The column on the right side of the table titled "Significantly Better Performance Due to Tutoring" lists the results of significance tests of the difference between performance of tutored and non-tutored students. The significance tests used for these comparisons was the Lawshe-Baker method of comparing percentages based on the Chi-Square distribution.

TUTORING EVALUATION
SPRING 1974

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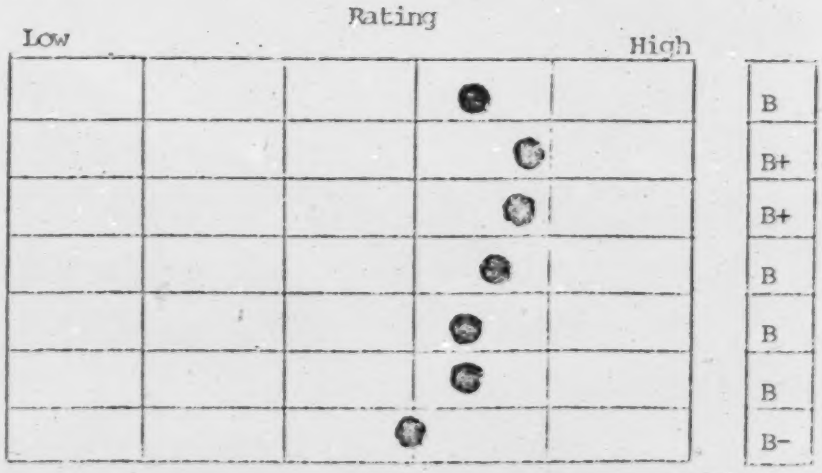
ALL STUDENTS IN ALL DEPARTMENTS

	Tutored	Not Tutored	Significantly Better Performance Due to Tutoring
1. Number	327	5218	--
2. Per cent	--	--	--
3. Withdrawal Rate ("W")	23%	31%	yes
4. Survival Rate ("A"+"B"+"C"+"D"+"CR")	72%	59%	yes
5. Successful Performance Rate ("A"+"B"+"C"+"CR")	65%	56%	yes
6. High Performance Rate ("A"+"B")	39%	36%	no

SUBJECTIVE EVALUATION OF TUTORING IN THIS SUBJECT

21% Per cent Responded to Questionnaire

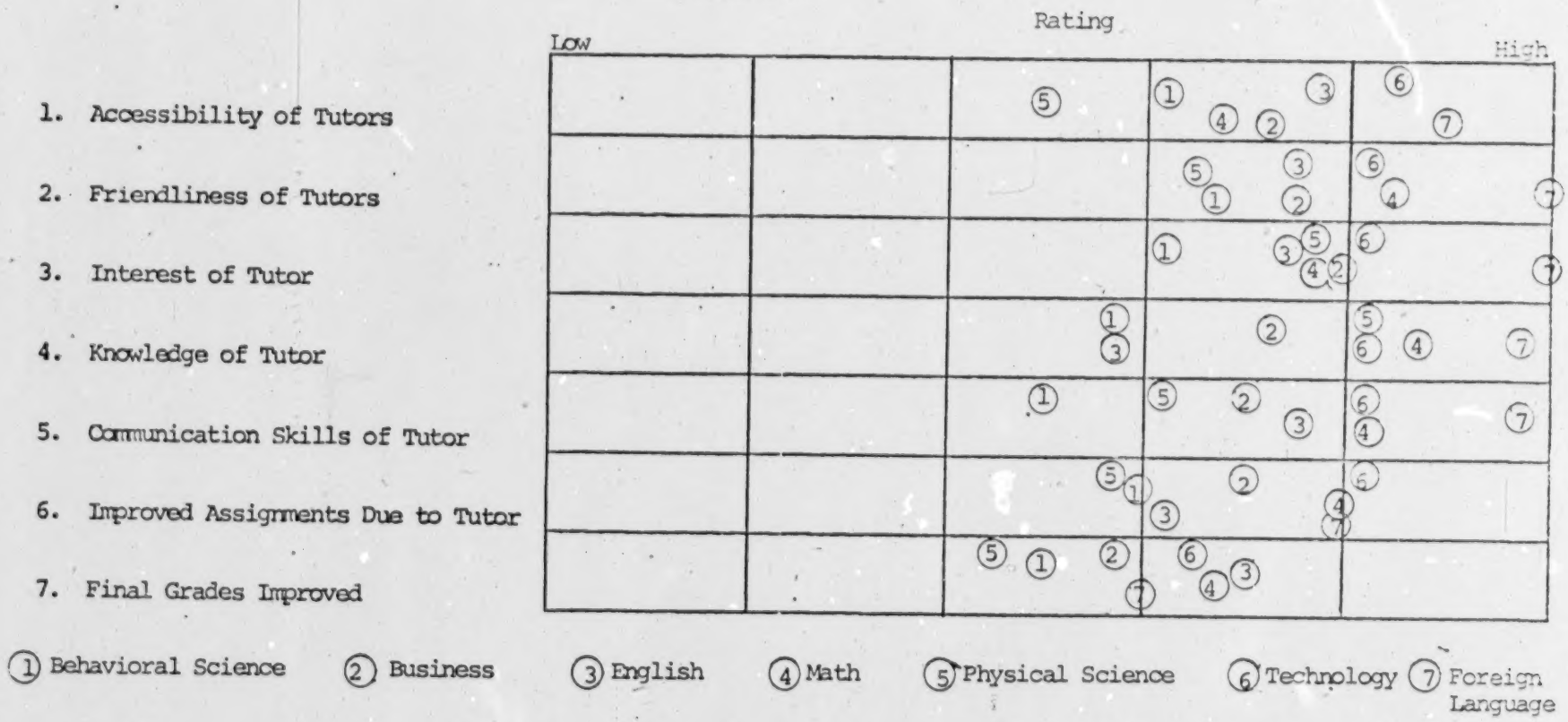


8. Who introduced you to tutoring?

Instructor 37% Counselor 5% Tutor 13% Other Students 23%

● Over-all Rating ( ) Departmental Rating

SUBJECTIVE EVALUATION OF TUTORING
COMPARISON BY DEPARTMENT
SPRING 1974



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TUTORING EVALUATION
SPRING 1974

All	Subject or Class (es)	Behavioral Science	Department

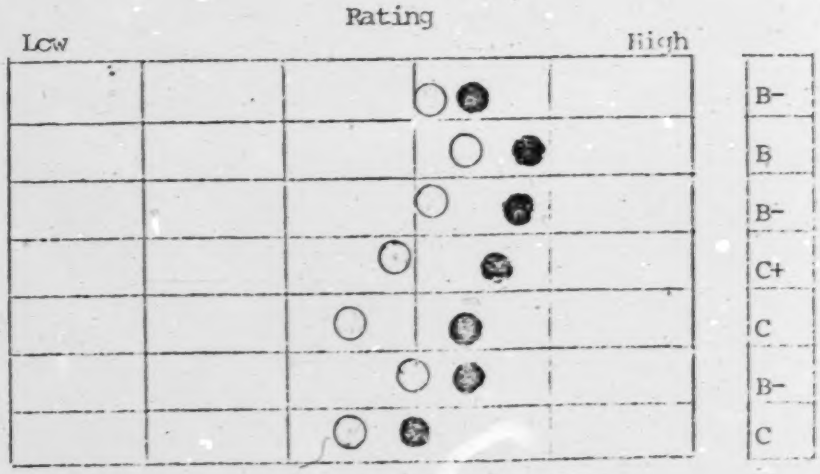
16% Per cent of all tutoring was done in this Department.

--- Per cent of all tutoring in this Department was done in this class.

	Tutored	Not Tutored	Significantly Better Performance Due to Tutoring
1. Number	53	1018	---
2. Per cent	5%	95%	---
3. Withdrawal Rate ("W")	13%	28%	yes
4. Survival Rate ("A"+"B"+"C"+"D"+"CR")	88%	66%	yes
5. Successful Performance Rate ("A"+"B"+"C"+"CR")	74%	61%	yes
6. High Performance Rate ("A"+"B")	63%	34%	yes

SUBJECTIVE EVALUATION OF TUTORING IN THIS SUBJECT

30% Per cent Responded to Questionnaire



1. Accessibility of Tutors
2. Friendliness of Tutors
3. Interest of Tutor
4. Knowledge of Tutor
5. Communication Skills of Tutor
6. Improved Assignments Due to Tutor
7. Final Grades Improved
8. Who introduced you to tutoring?

Instructor 56% Counselor 0 Tutor 13% Other Students 19%

● Overall Rating ○ Departmental Rating

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TUTORING EVALUATION
SPRING 1974

Anthropology I	Subject or Class (es)	Behavioral Science	Department

--- Per cent of all tutoring was done in this Department.

25% Per cent of all tutoring in this Department was done in this class.

	Tutored	Not Tutored	Significantly Better Performance Due to Tutoring
1. Number	13	143	---
2. Per cent	8%	92%	---
3. Withdrawal Rate ("W")	8%	22%	no
4. Survival Rate ("A"+"B"+"C"+"D"+"CR")	84%	70%	no
5. Successful Performance Rate ("A"+"B"+"C"+"CR")	84%	66%	no
6. High Performance Rate ("A"+"B")	77%	36%	yes

Anthropology II	Subject or Class (es)	Behavioral Science	Department

--- Per cent of all tutoring was done in this Department.

13% Per cent of all tutoring in this Department was done in this class.

	Tutored	Not Tutored	Significantly Better Performance Due to Tutoring
1. Number	7 *	79	---
2. Per cent	8%	92%	---
3. Withdrawal Rate ("W")	0	23%	yes
4. Survival Rate ("A"+"B"+"C"+"D"+"CR")	100%	75%	yes
5. Successful Performance Rate ("A"+"B"+"C"+"CR")	100%	71%	yes
6. High Performance Rate ("A"+"B")	86%	61%	no

* Small number: Caution should be exercised in interpreting significance test results.

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Sociology 70 — Subject or Class (es)

Behavioral Science — Department

---- Per cent of all tutoring was done in this Department.

13% Per cent of all tutoring in this Department was done in this class.

	Tutored	Not Tutored	Significantly Better Performance Due to Tutoring
1. Number	7 *	25	---
2. Per cent	22%	78%	---
3. Withdrawal Rate ("W")	0	56%	yes
4. Survival Rate ("A"+"B"+"C"+"D"+"CR")	100%	28%	yes
5. Successful Performance Rate ("A"+"B"+"C"+"CR")	100%	20%	yes
6. High Performance Rate ("A"+"B")	86%	12%	yes

Geography I — Subject or Class (es)

Behavioral Science — Department

--- Per cent of all tutoring was done in this Department.

30% Per cent of all tutoring in this Department was done in this class.

	Tutored	Not Tutored	Significantly Better Performance Due to Tutoring
1. Number	16	143	---
2. Per cent	10%	90%	---
3. Withdrawal Rate ("W")	13%	33%	yes
4. Survival Rate ("A"+"B"+"C"+"D"+"CR")	81%	61%	no
5. Successful Performance Rate ("A"+"B"+"C"+"CR")	75%	57%	no
6. High Performance Rate ("A"+"B")	62%	26%	yes

* Small number: Caution should be exercised in interpreting significance test results.

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TUTORING EVALUATION
SPRING 1974

All	Subject or Class (es)	Business	Department

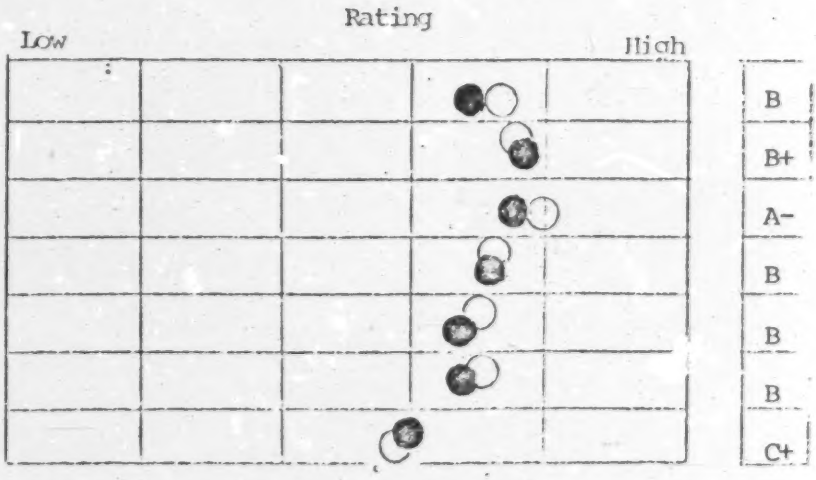
15% Per cent of all tutoring was done in this Department.

--- Per cent of all tutoring in this Department was done in this class.

	Tutored	Not Tutored	Significantly Better Performance Due to Tutoring
1. Number	50	1133	---
2. Per cent	4%	96%	---
3. Withdrawal Rate ("W")	36%	31%	no
4. Survival Rate ("A"+"B"+"C"+"D"+"CR")	62%	56%	no
5. Successful Performance Rate ("A"+"B"+"C"+"CR")	58%	51%	no
6. High Performance Rate ("A"+"B")	30%	40%	no

SUBJECTIVE EVALUATION OF TUTORING IN THIS SUBJECT

30% Per cent Responded to Questionnaire



Who introduced you to tutoring?

Instructor 27% Counselor 7% Tutor 7% Other Students 20%

● Over-all Rating ○ Departmental Rating

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Business 1A	Subject or Class (es)	Business	Department

--- Per cent of all tutoring was done in this Department.

48% Per cent of all tutoring in this Department was done in this class.

	Tutored	Not Tutored	Significantly Better Performance Due to Tutoring
1. Number	24	155	---
2. Per cent	13%	87%	---
3. Withdrawal Rate ("W")	46%	35%	no
4. Survival Rate ("A"+"B"+"C"+"D"+"CR")	54%	62%	no
5. Successful Performance Rate ("A"+"B"+"C"+"CR")	50%	58%	no
6. High Performance Rate ("A"+"B")	12%	38%	no

Business 83	Subject or Class (es)	Business	Department

--- Per cent of all tutoring was done in this Department.

16% Per cent of all tutoring in this Department was done in this class.

	Tutored	Not Tutored	Significantly Better Performance Due to Tutoring
1. Number	8 *	116	---
2. Per cent	6%	94%	---
3. Withdrawal Rate ("W")	0	30%	yes
4. Survival Rate ("A"+"B"+"C"+"D"+"CR")	100%	65%	yes
5. Successful Performance Rate ("A"+"B"+"C"+"CR")	100%	59%	yes
6. High Performance Rate ("A"+"B")	88%	44%	yes

* Small number: Caution should be exercised in interpreting significance test results.

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Business 7 — Subject or Class (es)

Business — Department

--- Per cent of all tutoring was done in this Department.

10% Per cent of all tutoring in this Department was done in this class.

	Tutored	Not Tutored	Significantly Better Performance Due to Tutoring
1. Number	5 *	73	---
2. Per cent	6%	94%	---
3. Withdrawal Rate ("W")	40%	64%	no
4. Survival Rate ("A"+"B"+"C"+"D"+"CR")	40%	27%	no
5. Successful Performance Rate ("A"+"B"+"C"+"CR")	40%	23%	no
6. High Performance Rate ("A"+"B")	40%	14%	no

Subject or Class (es)

Department

Per cent of all tutoring was done in this Department.

Per cent of all tutoring in this Department was done in this class.

	Tutored	Not Tutored	Significantly Better Performance Due to Tutoring
1. Number			
2. Per cent			
3. Withdrawal Rate ("W")			
4. Survival Rate ("A"+"B"+"C"+"D"+"CR")			
5. Successful Performance Rate ("A"+"B"+"C"+"CR")			
6. High Performance Rate ("A"+"B")			

* Small number: Caution should be exercised in interpreting significance test results.

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TUTORING EVALUATION
SPRING 1974

All	Subject or Class (es)	English	Department

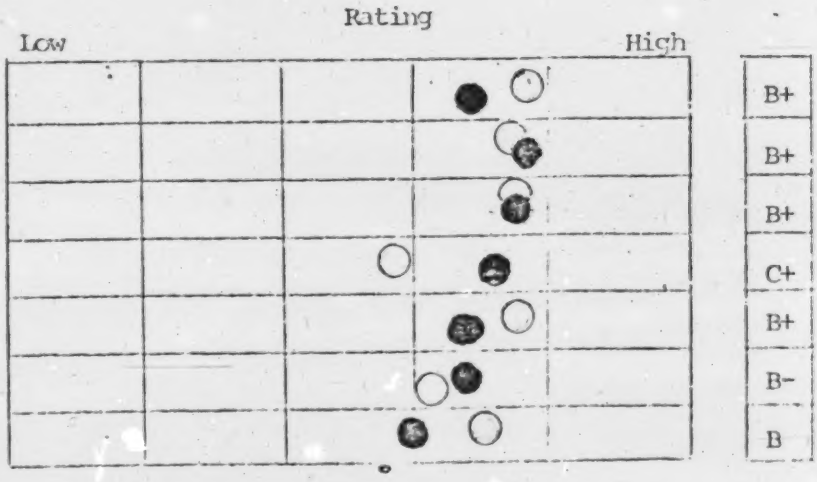
13% Per cent of all tutoring was done in this Department.

--- Per cent of all tutoring in this Department was done in this class.

	Tutored	Not Tutored	Significantly Better Performance Due to Tutoring
1. Number	42	1004	---
2. Per cent	4%	96%	---
3. Withdrawal Rate ("W")	12%	41%	yes
4. Survival Rate ("A"+"B"+"C"+"D"+"CR")	76%	52%	yes
5. Successful Performance Rate ("A"+"B"+"C"+"CR")	67%	48%	yes
6. High Performance Rate ("A"+"B")	19%	24%	no

SUBJECTIVE EVALUATION OF TUTORING IN THIS SUBJECT

19% Per cent Responded to Questionnaire



1. Accessibility of Tutors
2. Friendliness of Tutors
3. Interest of Tutor
4. Knowledge of Tutor
5. Communication Skills of Tutor
6. Improved Assignments Due to Tutor
7. Final Grades Improved
8. Who introduced you to tutoring?

Instructor [13%] Counselor [13%] Tutor [13%] Other Students [38%]

● Over-all Rating ○ Departmental Rating

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English D — Subject or Class (es)

English — Department

--- Per cent of all tutoring was done in this Department.

26% Per cent of all tutoring in this Department was done in this class.

	Tutored	Not Tutored	Significantly Better Performance Due to Tutoring
1. Number	11	138	---
2. Per cent	7%	93%	---
3. Withdrawal Rate ("W")	18%	45%	yes
4. Survival Rate ("A"+"B"+"C"+"D"+"CR")	83%	46%	yes
5. Successful Performance Rate ("A"+"B"+"C"+"CR")	73%	40%	yes
6. High Performance Rate ("A"+"B")	27%	22%	no

English A — Subject or Class (es)

English — Department

--- Per cent of all tutoring was done in this Department.

26% Per cent of all tutoring in this Department was done in this class.

	Tutored	Not Tutored	Significantly Better Performance Due to Tutoring
1. Number	11	6	---
2. Per cent	65%	35%	---
3. Withdrawal Rate ("W")	9%	50%	yes
4. Survival Rate ("A"+"B"+"C"+"D"+"CR")	73%	33%	no
5. Successful Performance Rate ("A"+"B"+"C"+"CR")	64%	33%	no
6. High Performance Rate ("A"+"B")	18%	33%	no

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English 5 — Subject or Class (es)

English — Department

--- Per cent of all tutoring was done in this Department.

17% Per cent of all tutoring in this Department was done in this class.

	Tutored	Not Tutored	Significantly Better Performance Due to Tutoring
1. Number	7 *	336	---
2. Per cent	2%	98%	---
3. Withdrawal Rate ("W")	0	38%	yes
4. Survival Rate ("A"+"B"+"C"+"D"+"CR")	86%	58%	no
5. Successful Performance Rate ("A"+"B"+"C"+"CR")	71%	55%	no
6. High Performance Rate ("A"+"B")	14%	27%	no

English 3 — Subject or Class (es)

English — Department

--- Per cent of all tutoring was done in this Department.

14% Per cent of all tutoring in this Department was done in this class.

	Tutored	Not Tutored	Significantly Better Performance Due to Tutoring
1. Number	6 *	237	---
2. Per cent	2%	98%	---
3. Withdrawal Rate ("W")	17%	41%	no
4. Survival Rate ("A"+"B"+"C"+"D"+"CR")	50%	50%	no
5. Successful Performance Rate ("A"+"B"+"C"+"CR")	33%	46%	no
6. High Performance Rate ("A"+"B")	0	21%	no

* Small number: Caution should be exercised in interpreting significance test results.

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TUTORING EVALUATION
SPRING 1974

All	Subject or Class (es)	Foreign Language	Department

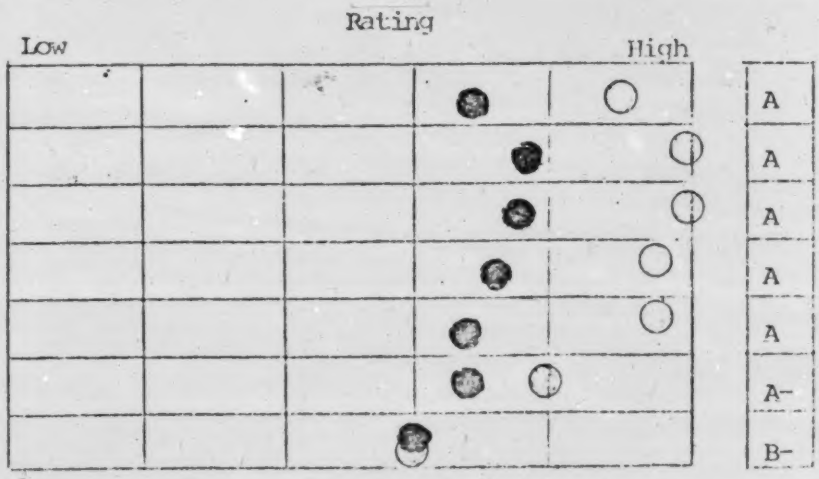
9% Per cent of all tutoring was done in this Department.

-- Per cent of all tutoring in this Department was done in this class.

	Tutored	Not Tutored	Significantly Better Performance Due to Tutoring
1. Number	31	319	---
2. Per cent	9%	91%	---
3. Withdrawal Rate ("W")	19%	40%	yes
4. Survival Rate ("A"+"B"+"C"+"D"+"CR")	77%	56%	yes
5. Successful Performance Rate ("A"+"B"+"C"+"CR")	68%	56%	no
6. High Performance Rate ("A"+"B")	55%	39%	no

SUBJECTIVE EVALUATION OF TUTORING IN THIS SUBJECT

16% Per cent Responded to Questionnaire



8. Who introduced you to tutoring?

Instructor 20% Counselor 0 Tutor 40% Other Students 40%

● Over-all Rating ○ Departmental Rating

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Spanish I — Subject or Class (es)

Foreign Language — Department

--- Per cent of all tutoring was done in this Department.

42% Per cent of all tutoring in this Department was done in this class.

	Tutored	Not Tutored	Significantly Better Performance Due to Tutoring
1. Number	13	157	---
2. Per cent	8%	92%	---
3. Withdrawal Rate ("W")	15%	46%	yes
4. Survival Rate ("A"+"B"+"C"+"D"+"CR")	77%	50%	yes
5. Successful Performance Rate ("A"+"B"+"C"+"CR")	61%	48%	no
6. High Performance Rate ("A"+"B")	61%	31%	yes

Subject or Class (es)

Department

Per cent of all tutoring was done in this Department.

Per cent of all tutoring in this Department was done in this class.

	Tutored	Not Tutored	Significantly Better Performance Due to Tutoring
1. Number			
2. Per cent			
3. Withdrawal Rate ("W")			
4. Survival Rate ("A"+"B"+"C"+"D"+"CR")			
5. Successful Performance Rate ("A"+"B"+"C"+"CR")			
6. High Performance Rate ("A"+"B")			

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TUTORING EVALUATION
SPRING 1974

All	Subject or Class (es)	Math	Department

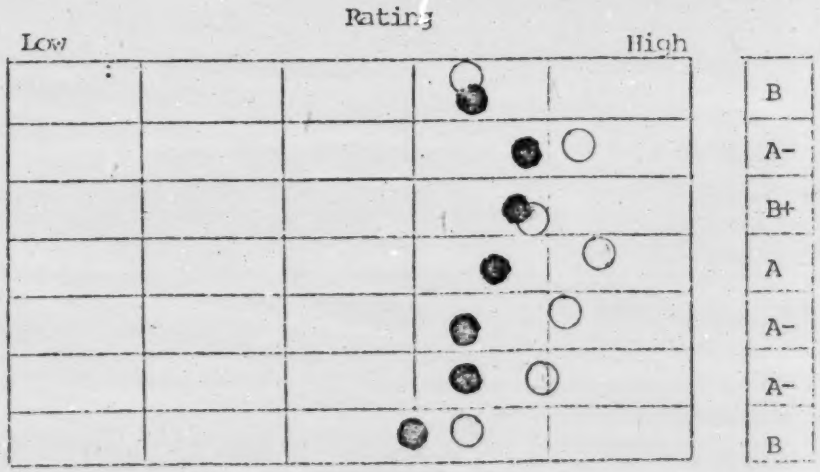
18% Per cent of all tutoring was done in this Department.

--- Per cent of all tutoring in this Department was done in this class.

	Tutored	Not Tutored	Significantly Better Performance Due to Tutoring
1. Number	59	1071	---
2. Per cent	6%	94%	---
3. Withdrawal Rate ("W")	37%	32%	no
4. Survival Rate ("A"+"B"+"C"+"D"+"CR")	54%	62%	no
5. Successful Performance Rate ("A"+"B"+"C"+"CR")	51%	60%	no
6. High Performance Rate ("A"+"B")	24%	38%	no

SUBJECTIVE EVALUATION OF TUTORING IN THIS SUBJECT

19% Per cent Responded to Questionnaire



1. Accessibility of Tutors
2. Friendliness of Tutors
3. Interest of Tutor
4. Knowledge of Tutor
5. Communication Skills of Tutor
6. Improved Assignments Due to Tutor
7. Final Grades Improved
8. Who introduced you to tutoring?

Instructor 18% Counselor 9% Tutor 18% Other Students 27%

● Overall Rating ○ Departmental Rating

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TUTORING EVALUATION
SPRING 1974

Math 3	Subject or Class (es)	Math	Department

--- Per cent of all tutoring was done in this Department.

31% Per cent of all tutoring in this Department was done in this class.

	Tutored	Not Tutored	Significantly Better Performance Due to Tutoring
1. Number	18	55	---
2. Per cent	25%	75%	---
3. Withdrawal Rate ("W")	39%	47%	no
4. Survival Rate ("A"+"B"+"C"+"D"+"CR")	39%	42%	no
5. Successful Performance Rate ("A"+"B"+"C"+"CR")	39%	42%	no
6. High Performance Rate ("A"+"B")	22%	16%	no

	Subject or Class (es)		Department

Per cent of all tutoring was done in this Department.

Per cent of all tutoring in this Department was done in this class.

	Tutored	Not Tutored	Significantly Better Performance Due to Tutoring
1. Number			
2. Per cent			
3. Withdrawal Rate ("W")			
4. Survival Rate ("A"+"B"+"C"+"D"+"CR")			
5. Successful Performance Rate ("A"+"B"+"C"+"CR")			
6. High Performance Rate ("A"+"B")			

TUTORING EVALUATION
SPRING 1974

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Math 21A — Subject or Class (es)

Math — Department

--- Per cent of all tutoring was done in this Department.

14% Per cent of all tutoring in this Department was done in this class.

	Tutored	Not Tutored	Significantly Better Performance Due to Tutoring
1. Number	8 *	42	---
2. Per cent	16%	84%	---
3. Withdrawal Rate ("W")	38%	38%	no
4. Survival Rate ("A"+"B"+"C"+"D"+"CR")	63%	59%	no
5. Successful Performance Rate ("A"+"B"+"C"+"CR")	63%	57%	no
6. High Performance Rate ("A"+"B")	50%	36%	no

Math 1A,B,C,D — Subject or Class (es)

Math — Department

--- Per cent of all tutoring was done in this Department.

27% Per cent of all tutoring in this Department was done in this class.

	Tutored	Not Tutored	Significantly Better Performance Due to Tutoring
1. Number	16	89	---
2. Per cent	15%	85%	---
3. Withdrawal Rate ("W")	32%	24%	no
4. Survival Rate ("A"+"B"+"C"+"D"+"CR")	49%	60%	no
5. Successful Performance Rate ("A"+"B"+"C"+"CR")	49%	60%	no
6. High Performance Rate ("A"+"B")	25%	25%	no

*Small number: Caution should be exercised in interpreting significance test results.

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TUTORING EVALUATION
SPRING 1974

All	Subject or Class (es)	Para-medical	Department

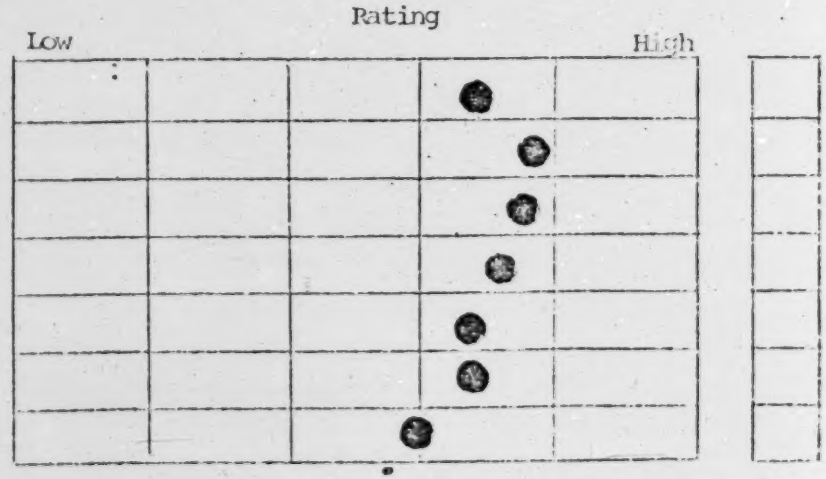
[4%] Per cent of all tutoring was done in this Department.

[--] Per cent of all tutoring in this Department was done in this class.

	Tutored	Not Tutored	Significantly Better Performance Due to Tutoring
1. Number	13	146	---
2. Per cent	8%	92%	---
3. Withdrawal Rate ("W")	15%	1%	no
4. Survival Rate ("A"+"B"+"C"+"D"+"CR")	69%	99%	no
5. Successful Performance Rate ("A"+"B"+"C"+"CR")	69%	99%	no
6. High Performance Rate ("A"+"B")	38%	80%	no

SUBJECTIVE EVALUATION OF TUTORING IN THIS SUBJECT

[ ] Per cent Responded to Questionnaire * Insufficient Data for Program Evaluation



8. Who introduced you to tutoring?

Instructor [ ] Counselor [ ] Tutor [ ] Other Students [ ]

● Overall Rating ○ Departmental Rating

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Nurses Aide , Subject or Class (es)

Para-medical Department

--- Per cent of all tutoring was done in this Department.

46% Per cent of all tutoring in this Department was done in this class.

	Tutored	Not Tutored	Significantly Better Performance Due to Tutoring
1. Number	6 *	12	---
2. Per cent	33%	67%	---
3. Withdrawal Rate ("W")	33%	0	no
4. Survival Rate ("A"+"B"+"C"+"D"+"CR")	33%	100%	no
5. Successful Performance Rate ("A"+"B"+"C"+"CR")	33%	100%	no
6. High Performance Rate ("A"+"B")	17%	83%	no

Subject or Class (es)

Department

Per cent of all tutoring was done in this Department.

Per cent of all tutoring in this Department was done in this class.

	Tutored	Not Tutored	Significantly Better Performance Due to Tutoring
1. Number			
2. Per cent			
3. Withdrawal Rate ("W")			
4. Survival Rate ("A"+"B"+"C"+"D"+"CR")			
5. Successful Performance Rate ("A"+"B"+"C"+"CR")			
6. High Performance Rate ("A"+"B")			

* Small number: Caution should be exercised in interpreting significance test results.

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TUTORING EVALUATION
SPRING 1974

All	Subject or Class (es)	Performing Arts	Department

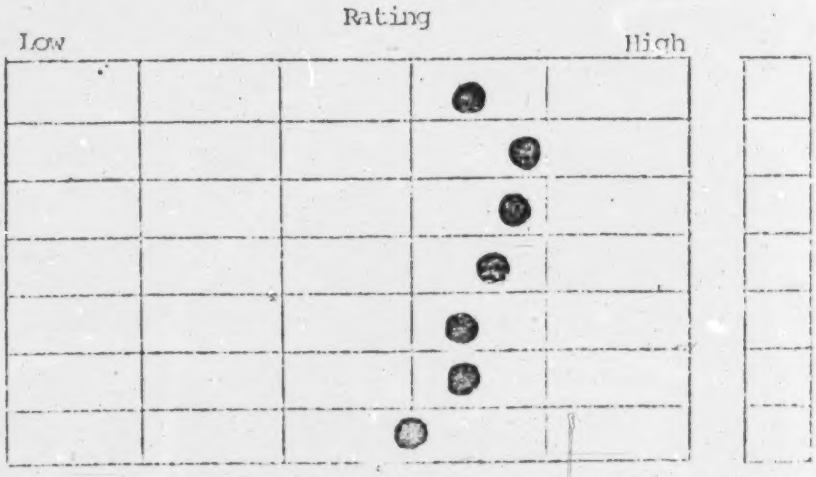
2% Per cent of all tutoring was done in this Department.

-- Per cent of all tutoring in this Department was done in this class.

	Tutored	Not Tutored	Significantly Better Performance Due to Tutoring
1. Number	7 *	78	---
2. Per cent	3%	97%	---
3. Withdrawal Rate ("W")	43%	36%	no
4. Survival Rate ("A"+"B"+"C"+"D"+"CR")	57%	53%	no
5. Successful Performance Rate ("A"+"B"+"C"+"CR")	57%	51%	no
6. High Performance Rate ("A"+"B")	0	43%	no

SUBJECTIVE EVALUATION OF TUTORING IN THIS SUBJECT

Per cent Responded to Questionnaire * Insufficient Data for Program Evaluation



1. Accessibility of Tutors
2. Friendliness of Tutors
3. Interest of Tutor
4. Knowledge of Tutor
5. Communication Skills of Tutor
6. Improved Assignments Due to Tutor
7. Final Grades Improved
8. Who introduced you to tutoring?

Instructor [ ] Counselor [ ] Tutor [ ] Other Students [ ]

● General Rating ○ Departmental Rating

*Small number: Caution should be exercised in interpreting significance test results.

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TUTORING EVALUATION
SPRING 1974

Music 7 — Subject or Class (es)

Performing Arts — Department

---- Per cent of all tutoring was done in this Department.

71% Per cent of all tutoring in this Department was done in this class.

	Tutored	Not Tutored	Significantly Better Performance Due to Tutoring
1. Number	5 *	21	---
2. Per cent	19%	81%	---
3. Withdrawal Rate ("W")	60%	29%	no
4. Survival Rate ("A"+"B"+"C"+"D"+"CR")	40%	52%	no
5. Successful Performance Rate ("A"+"B"+"C"+"CR")	40%	48%	no
6. High Performance Rate ("A"+"B")	0	48%	no

Subject or Class (es)

Department

Per cent of all tutoring was done in this Department.

Per cent of all tutoring in this Department was done in this class.

	Tutored	Not Tutored	Significantly Better Performance Due to Tutoring
1. Number			
2. Per cent			
3. Withdrawal Rate ("W")			
4. Survival Rate ("A"+"B"+"C"+"D"+"CR")			
5. Successful Performance Rate ("A"+"B"+"C"+"CR")			
6. High Performance Rate ("A"+"B")			

* Small number: Caution should be exercised in interpreting significance test results.

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TUTORING EVALUATION
SPRING 1974

All	Subject or Class (es)	Physical Science	Department

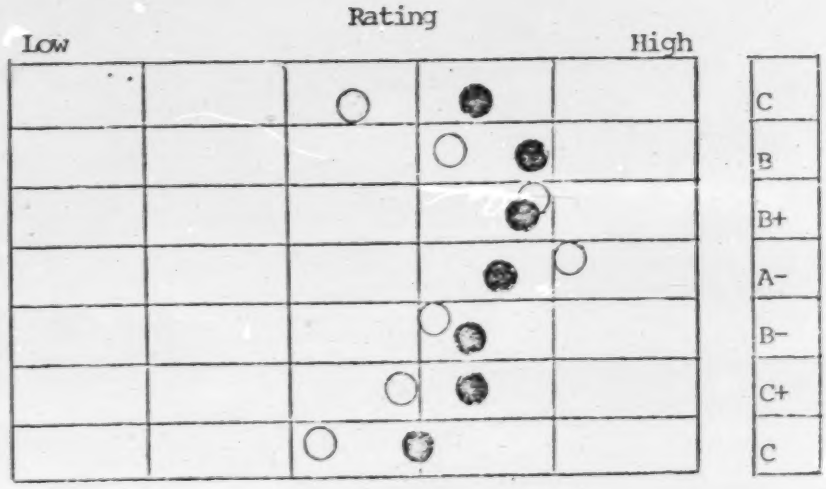
7% Per cent of all tutoring was done in this Department.

-- Per cent of all tutoring in this Department was done in this class.

	Tutored	Not Tutored	Significantly Better Performance Due to Tutoring
1. Number	24	298	--
2. Per cent	7%	93%	--
3. Withdrawal Rate ("W")	25%	43%	yes
4. Survival Rate ("A"+"B"+"C"+"D"+"CR")	67%	44%	yes
5. Successful Performance Rate ("A"+"B"+"C"+"CR")	58%	40%	yes
6. High Performance Rate ("A"+"B")	42%	23%	yes

SUBJECTIVE EVALUATION OF TUTORING IN THIS SUBJECT

25% Per cent Responded to Questionnaire



1. Accessibility of Tutors
2. Friendliness of Tutors
3. Interest of Tutor
4. Knowledge of Tutor
5. Communication Skills of Tutor
6. Improved Assignments Due to Tutor
7. Final Grades Improved
8. Who introduced you to tutoring?

Instructor 50% Counselor 0 Tutor 0 Other Students 17%

● Over-all Rating ○ Departmental Rating

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Chemistry 7	Subject or Class (es)	Physical Science	Department

--- Per cent of all tutoring was done in this Department.

33% Per cent of all tutoring in this Department was done in this class.

	Tutored	Not Tutored	Significantly Better Performance Due to Tutoring
1. Number	8 *	77	---
2. Per cent	9%	91%	---
3. Withdrawal Rate ("W")	25%	56%	no
4. Survival Rate ("A"+"B"+"C"+"D"+"CR")	50%	26%	no
5. Successful Performance Rate ("A"+"B"+"C"+"CR")	50%	24%	no
6. High Performance Rate ("A"+"B")	38%	17%	no

Chemistry 1A	Subject or Class (es)	Physical Science	Department

--- Per cent of all tutoring was done in this Department.

29% Per cent of all tutoring in this Department was done in this class.

	Tutored	Not Tutored	Significantly Better Performance Due to Tutoring
1. Number	6 *	47	---
2. Per cent	11%	89%	---
3. Withdrawal Rate ("W")	17%	36%	no
4. Survival Rate ("A"+"B"+"C"+"D"+"CR")	83%	49%	no
5. Successful Performance Rate ("A"+"B"+"C"+"CR")	83%	45%	no
6. High Performance Rate ("A"+"B")	50%	23%	no

* Small number: Caution should be exercised in interpreting significance test results.

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TUTORING EVALUATION
SPRING 1974

All	Subject or Class (es)	Technology	Department

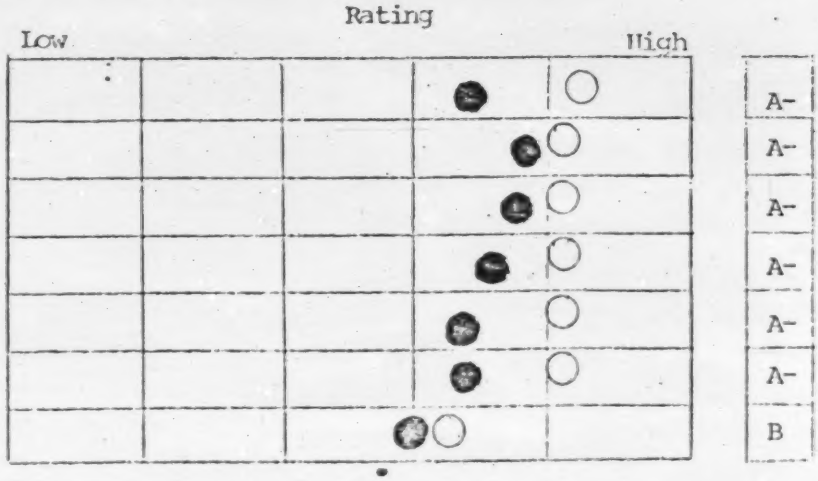
14% Per cent of all tutoring was done in this Department.

--- Per cent of all tutoring in this Department was done in this class.

	Tutored	Not Tutored	Significantly Better Performance Due to Tutoring
1. Number	47	151	---
2. Per cent	31%	69%	---
3. Withdrawal Rate ("W")	11%	26%	yes
4. Survival Rate ("A"+"B"+"C"+"D"+"CR")	87%	65%	yes
5. Successful Performance Rate ("A"+"B"+"C"+"CR")	85%	61%	yes
6. High Performance Rate ("A"+"B")	57%	39%	yes

SUBJECTIVE EVALUATION OF TUTORING IN THIS SUBJECT

9% Per cent Responded to Questionnaire



8. Who introduced you to tutoring?

Instructor 33% Counselor 0 Tutor 0 Other Students 67%

● Over-all Rating ○ Departmental Rating

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Electronics 10 — Subject or Class (es)

Technology — Department

--- Per cent of all tutoring was done in this Department.

28% Per cent of all tutoring in this Department was done in this class.

	Tutored	Not Tutored	Significantly Better Performance Due to Tutoring
1. Number	16	10	---
2. Per cent	62%	38%	---
3. Withdrawal Rate ("W")	25%	70%	yes
4. Survival Rate ("A"+"B"+"C"+"D"+"CR")	75%	30%	yes
5. Successful Performance Rate ("A"+"B"+"C"+"CR")	69%	20%	yes
6. High Performance Rate ("A"+"B")	56%	0	yes

Architecture 30 — Subject or Class (es)

Technology — Department

--- Per cent of all tutoring was done in this Department.

15% Per cent of all tutoring in this Department was done in this class.

	Tutored	Not Tutored	Significantly Better Performance Due to Tutoring
1. Number	7 *	13	---
2. Per cent	35%	65%	---
3. Withdrawal Rate ("W")	0	0	no
4. Survival Rate ("A"+"B"+"C"+"D"+"CR")	100%	84%	no
5. Successful Performance Rate ("A"+"B"+"C"+"CR")	100%	84%	no
6. High Performance Rate ("A"+"B")	71%	61%	no

* Small number: Caution should be exercised in interpreting significance test results.

TUTORING EVALUATION
SPRING 1974

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Architecture 53 — Subject or Class (es)

Technology — Department

--- Per cent of all tutoring was done in this Department.

15% Per cent of all tutoring in this Department was done in this class.

	Tutored	Not Tutored	Significantly Better Performance Due to Tutoring
1. Number	7 *	14	---
2. Per cent	33%	67%	---
3. Withdrawal Rate ("W")	0	0	no
4. Survival Rate ("A"+"B"+"C"+"D"+"CR")	100%	86%	no
5. Successful Performance Rate ("A"+"B"+"C"+"CR")	100%	86%	no
6. High Performance Rate ("A"+"B")	100%	71%	yes

Architecture 22 — Subject or Class (es)

Technology — Department

--- Per cent of all tutoring was done in this Department.

17% Per cent of all tutoring in this Department was done in this class.

	Tutored	Not Tutored	Significantly Better Performance Due to Tutoring
1. Number	8 *	15	---
2. Per cent	35%	65%	---
3. Withdrawal Rate ("W")	0	0	no
4. Survival Rate ("A"+"B"+"C"+"D"+"CR")	100%	87%	no
5. Successful Performance Rate ("A"+"B"+"C"+"CR")	100%	87%	no
6. High Performance Rate ("A"+"B")	50%	67%	no

* Small number: Caution should exercised in interpreting significance test results.

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TUTORING EVALUATION
SPRING 1974

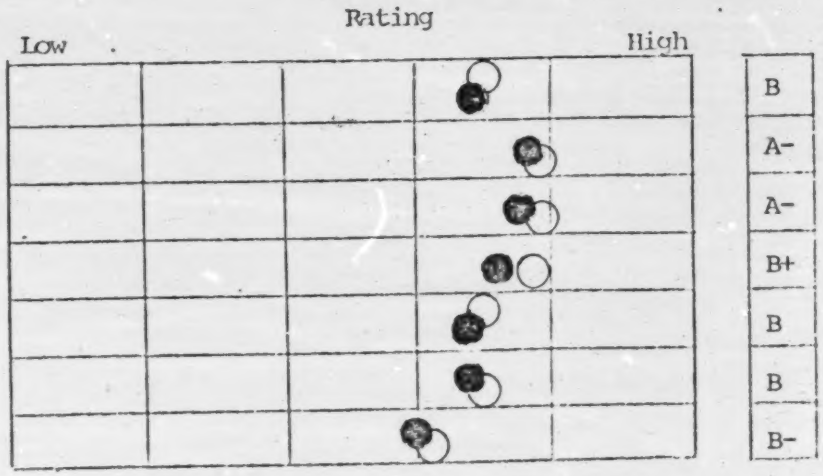
ANGLO STUDENTS

53% of all tutoring was done for Anglo students.

	Tutored	Not Tutored	Significantly Better Performance Due to Tutoring
1. Number	173	3417	---
2. Per cent	5%	95%	---
3. Withdrawal Rate ("W")	19%	26%	yes
4. Survival Rate ("A"+"B"+"C"+"D"+"CR")	76%	68%	yes
5. Successful Performance Rate ("A"+"B"+"C"+"CR")	72%	64%	yes
6. High Performance Rate ("A"+"B")	55%	42%	yes

SUBJECTIVE EVALUATION OF TUTORING IN THIS SUBJECT

27% Per cent Responded to Questionnaire



1. Accessibility of Tutors
2. Friendliness of Tutors
3. Interest of Tutor
4. Knowledge of Tutor
5. Communication Skills of Tutor
6. Improved Assignments Due to Tutor
7. Final Grades Improved
8. Who introduced you to tutoring?

Instructor 43% Counselor 3% Tutor 16% Other Students 22%

● Over-all Rating ○ Anglo Rating

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TUTORING EVALUATION
SPRING 1974

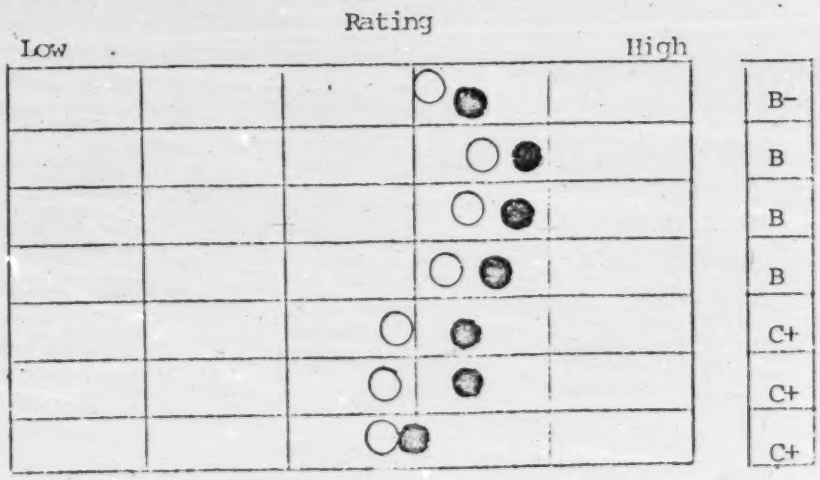
MEXICAN/AMERICAN STUDENTS

38% of all tutoring was done for Mexican/American students.

	Tutored	Not Tutored	Significantly Better Performance Due to Tutoring
1. Number	123	690	---
2. Per cent	15%	85%	---
3. Withdrawal Rate ("W")	24%	41%	yes
4. Survival Rate ("A"+"B"+"C"+"D"+"CR")	68%	49%	yes
5. Successful Performance Rate ("A"+"B"+"C"+"CR")	61%	45%	yes
6. High Performance Rate ("A"+"B")	21%	20%	no

SUBJECTIVE EVALUATION OF TUTORING IN THIS SUBJECT

15% Per cent Responded to Questionnaire

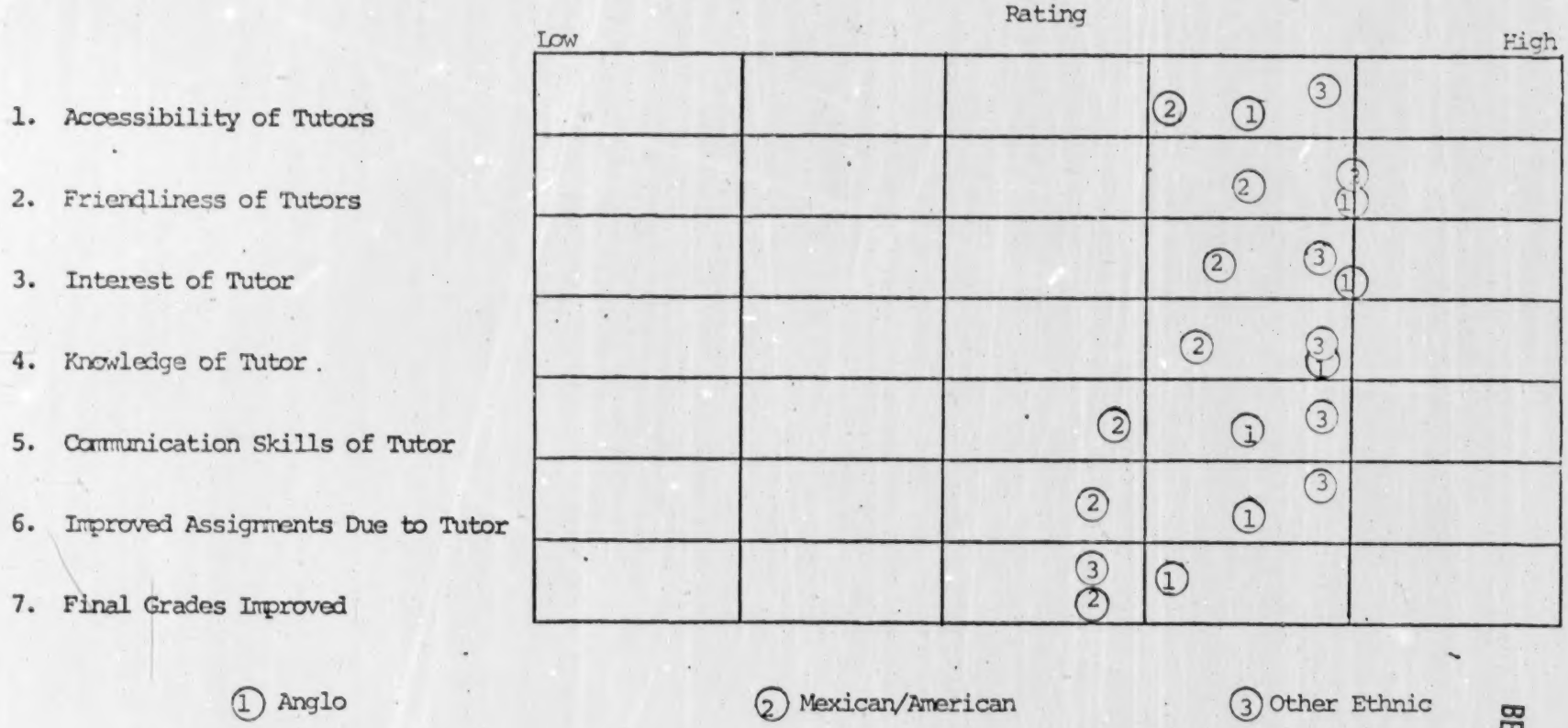


1. Accessibility of Tutors
2. Friendliness of Tutors
3. Interest of Tutor
4. Knowledge of Tutor
5. Communication Skills of Tutor
6. Improved Assignments Due to Tutor
7. Final Grades Improved
8. Who introduced you to tutoring?

Instructor 32% Counselor 11% Tutor 5% Other Students 26%

● Over-all Rating ○ Mexican/American Rating

SUBJECTIVE EVALUATION OF TUTORING
COMPARISON BY ETHNIC GROUP
SPRING 1974



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TUTORED AND NON-TUTORED CLASS PERFORMANCE
BY DEPARTMENT AND BY ETHNIC GROUP
SPRING 1974

Department		"A"+"B"	"A"+"B"+"C"+"CR"	"A"+"B"+"C"+"D"+"CR"	"W"
Behavioral Science					
Anglo	T- 41	76%*	80%	88%*	5%*
	NT-776	40%	66%	69%	25%
Mexican/American	T- 7	0	57%	57%	43%
	NT- 71	19%	44%	55%	34%
Business					
Anglo	T- 28	36%	68%	71%	29%
	NT-447	44%	64%	69%	28%
Mexican/American	T- 19	26%	53%	58%	37%*
	NT-121	15%	31%	47%	62%
English					
Anglo	T- 6	67%	83%	83%	17%
	NT-304	30%	55%	58%	37%
Mexican/American	T- 27	7%	63%*	78%*	11%*
	NT-212	15%	41%	45%	45%
Foreign Language					
Anglo	T- 23	61%*	74%*	78%*	17%*
	NT-160	34%	49%	51%	44%
Mexican/American	T- 7	43%	57%	71%	29%
	NT- 76	60%	87%	89%	35%
Technology					
Anglo	T- 18	61%*	78%*	83%*	17%*
	NT- 28	12%	26%	37%	58%
Mexican/American	T- 25	36%	84%	84%	12%
	NT- 56	70%	83%	84%	12%
Math					
Anglo	T- 28	32%	57%	57%	32%
	NT-607	41%	60%	61%	30%
Mexican/American	T- 21	21%	38%	48%	38%
	NT-151	13%	37%	39%	48%
Totals					
Anglo	T-173	55%*	72%*	76%*	19%*
	NT-3417	42%	64%	68%	26%
Mexican/American	T- 123	21%	61%*	68%*	24%*
	NT- 690	20%	45%	49%	41%

* Performance significantly higher by tutored students

DISCUSSION

Tutoring may be observed to affect performance in two major ways. One influence of tutoring is at what might be called the survival level of performance. The student may be heading for a "W" or "NCR" grade but with tutoring he is able to pull through with a "C" or "D". This kind of effect seems to occur, for example, in the English Department where non-tutored students withdraw at a rate four times greater than tutored students. (See page 33). This survival effect of tutoring can also be noted for Mexican/Americans in Business and for Anglos in Technology and Behavioral Science. Over all, tutoring improves the survival rate 8% for Anglos and 19% for Mexican/Americans.

Another major effect of tutoring is the performance effect at higher levels of performance. A student in this case may be performing at a "C" level and through tutoring he earns an "A" or "B". This kind of effect can be observed for Anglos in the Behavioral Science, Foreign Language and Technology Departments. This kind of effect is not observed in significant levels in any department for Mexican/Americans.

In general, tutoring significantly improves some level of performance in the Behavioral Science, English, Foreign Language, Physical Science and Technology Departments while tutoring fails to have significant effect on performance in Business (with the exception of Business 83), Math, Para-medical, or Performing Arts Departments.

One somewhat surprising finding is that tutored students did not have improved performance records in any class in the Math Department. Further

study matching students on math ability using math placement testing would be helpful.

The effect of tutoring upon students is different based on differences in ethnic background (See page 33). Students are tutored in different curricular areas and with different results. Mexican/Americans are helped in English and Business. There is also some improved performance in Math (which is not statistically significant). Anglo performance improves in Behavioral Science, Foreign Language and Technology.

The subjective evaluation of tutoring produced some interesting findings. In general, tutoring was given favorable ratings. Over-all, the highest rated item related to the friendliness of the tutors and the lowest rated item related to the student's perception of improvement in his final grade.

Departmentally, Foreign Language, Math, and Technology tutoring was given relatively high ratings while Behavioral Science and Physical Science tutoring received relatively lower subjective ratings.

There is some inconsistancy between the relative subjective ratings and the degree that performance actually improved, especially for the Math, Physical Science and Behavioral Science Departments. The inconsistancy becomes somewhat more understandable when the individual items are examined in light of the nature of academic performance and instruction in those curricular areas.

The rating of tutoring by Mexican/Americans is consistantly and significantly lower than the ratings given by Anglo students. The reasons for this are not immediately clear. A variety of hypothesis could be offered but additional research may be needed to understand the reasons.

RECOMMENDATIONS

As a result of this research, the following recommendations are suggested for the tutoring program at Southwestern College.

1) Quantifiable operational objectives should be established for the tutoring program so that future evaluations may assess progress toward these goals. These objectives should be specific and could have their genesis in beginning to solve some of the specific areas of weakness shown in this report.

2) To facilitate future evaluations, all tutoring on campus should use the method of record keeping which was instituted for EOPS tutoring in the Spring of 1974.

3) Methods of tutor selection and training should be reviewed and improved particularly in curricular areas where there is no measurable improvement in performance.

4) Future decisions related to resource allocation such as the number of tutors assigned to different curricular areas should be based on a rationale established in the operational objectives. (eg. "survival tutoring" versus "high performance" tutoring; successful tutoring versus unsuccessful tutoring from past semester, etc.)

5) Future evaluation of tutoring should emphasize objective performance and include subjective data as secondary means of analysis.

6) The tutoring program should continue to receive a detailed annual evaluation with the objective of improving the program.

7) The administrators and tutors of the EOPS tutoring program should be commended for making a genuinely positive contribution to the instructional program of Southwestern College in the Spring of 1974.

APPENDIX A

STUDENT PROFILE CARD - TUTORING CENTER

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NAME (Last) (first) _____ DATE _____ Social Security # _____

ADDRESS _____ Semester _____

CITY _____ ZIP _____ Course Listing

Telephone Number _____

Counselor _____

Major _____ Number of units enrolled

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____

Working? Yes ☐ No ☐

Part Time ☐ Full Time ☐

EOP ☐ Veteran ☐ Voc-Ed. ☐

Physically handicapped ☐

SUBJECT	TUTOR	HRS.	DATE	SUBJECT	TUTOR	HRS.	DATE

APPENDIX B

TUTORING EVALUATION

We are attempting to evaluate the effectiveness of our tutoring program so that we may better serve the needs of all students. You can help us to assess this program by your frank and honest answers to this questionnaire. Please feel free to make any comments you feel will help us in evaluating this program. Thank you.

Please rate the following statements according to a scale of 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree.

	Circle One				
1. I found it easy to get tutoring when I needed it.	1	2	3	4	5
2. The tutor was friendly and put me at ease.	1	2	3	4	5
3. The tutor seemed genuinely interested in helping me.	1	2	3	4	5
4. The tutor knew the subject matter well.	1	2	3	4	5
5. The tutor was able to explain the subject so it was clear to me.	1	2	3	4	5
6. Tutoring helped me to do better on class assignments and tests.	1	2	3	4	5
7. I improved my final grade in the class as a result of the tutoring I received.	1	2	3	4	5

UNIVERSITY OF CALIF.
LOS ANGELES

DEC 06 1974

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JUNIOR COLLEGE
INFORMATION

8. Who introduced you to tutoring?

_____ Instructor
_____ Counselor
_____ Tutor
_____ Other students (friends, etc.)
_____ Other

9. What are the specific strengths of the tutoring program? _____

_____

_____

_____

10. How could the tutoring program be improved? _____

_____

_____

_____